

## **ZOLL TECHNICAL SUPPORT AND SERVICE**

**ZOLL Medical Corporation** provides technical assistance through our Technical Support Department. Should the ZOLL equipment require service, contact the Technical Support Department directly.

### **Hours of Coverage**

Technical Support is available through our Technical Support Help Desk by calling **1- 800-348-9011**, Monday through Friday from **8:30AM to 6:00PM EST**.

The Technical Support Representative will require the following pertinent information to open a Service Request:

- Unit Serial Number
- Description of the complaint
- Department where the equipment is being used
- Patient information if applicable
- ECG strips if available
- Purchase Order number if the device is out of warranty

This information will assist us in performing a full evaluation when the product is received at our Depot. You will be given an RMA number to track the return of your product.

### **Emergency Service**

Technical Support is available on an emergency basis 7 days a week during the hours not covered during a normal business day. Emergency Support is available by calling **1-800-348-9011**.

### **Repairs**

Repair service is provided via Depot Repair at ZOLL Corporate in Chelmsford, MA.

Service is performed by factory trained Service Repair Technicians. Each unit is certified by successfully completing the 6 Month Checkout Procedure as detailed in the appropriate Service Manual, applying a Calibration sticker, and returning the product with a Warranty Repair Form indicating the work performed. As an ISO 9000 certified facility, we retain training records on each employee and are committed to providing the highest level of quality in the servicing of all ZOLL products.

### **Service Loaners**

A Service Loaner is available at no charge during the repair analysis process and is shipped to arrive before 10AM the next business day. ZOLL pays for the shipping and insurance of the customer unit and the Service Loaner while the unit is under Factory or Extended

Warranty.

### **Hourly Labor Rates**

Our current Depot Repair Rate is \$105 per hour. This rate is subject to change October 1<sup>st</sup> of each year.

### **Overtime Hours and Rates**

There is no additional cost for overtime on Depot repaired items.

### **On-site Service**

Repairs are performed at our Repair Depot at ZOLL Corporate in Chelmsford, MA. We do not offer on-site service.

### **Replacement Parts**

All replacement and repair exchange parts are typically available for shipment on the next business day following the request.

### **Repair Exchange (R/X) Program**

The Repair Exchange program allows you to purchase "Repair Exchange Parts" at 50% off List Price. When an order is shipped for a "Repair Exchange Part", you will receive an invoice at full list price. Once the repair is complete, you must return the defective module for repair. Once the defective part is returned, if the module is repairable, you will receive a credit for 50% off the List Price of the Invoice.

### **Guaranteed Parts Availability**

ZOLL guarantees parts for seven (7) years from the last date of manufacture.

### **Guaranteed Service Turnaround Time**

As an ISO 9000 certified facility we are constantly trying to improve our turnaround time while maintaining a high quality of repair. You can expect a less than 10 business day turnaround on repairs. A Service Loaner is available at no charge while the product is being repaired.

### **Guaranteed Equipment Uptime**

You can expect 99% uptime based on typical use and the arrival of a Free Service Loaner by 10AM the next business day.

## **ZOLL Medical Depot Repair**

ZOLL's product is designed, manufactured, distributed, and serviced under strict controls set forth by ZOLL's Quality System. It has been designed to comply with requirements set forth by the FDA and various regulatory standards and bodies. Our Quality System is certified and audited annually by TUV Rheinland for compliance with ISO 9000. ZOLL received its certification in 1995.

The ZOLL Depot Repair Team is a group of highly skilled, trained professionals that have extensive experience in electronics, product application, and process quality control.

The intense quality and environmental testing performed by this team at the factory cannot be duplicated in any field environment.

- After receipt of the device at the Repair Depot, a Technical Support Repair Technician will verify the reported malfunction prior to opening the unit.
- The suspect failed board will be replaced with a known "good" test board to verify that the suspected failure is repaired.
- The test board is then replaced by the original "suspect failed board" to again verify the original failure.
- This process verifies that there were no internal connectivity issues that were resolved by just disconnecting and reconnecting a board and that the failure is attributed to the suspect circuit board.
- If the original fault reappears, a known "good" board from stock is installed.
- In most cases, extensive environmental testing is performed (hot soak, cold soak and vibration).
- Board level testing of the defective module is then performed.
- Recertification of each device is completed per factory specifications outlined in the device Service Manual.
- Device is held, pending root cause analysis of the defective module.
- Technical review is performed by the Technical Support Help Desk to verify that the root cause analysis and the replaced module(s) coincide with the reported malfunction.

Before any device is released for shipment, a thorough review of the complaint file is done by the Technical Support Help Desk and the Quality Assurance Department. This is to ensure that the technical evaluation of the reported failure was conclusive and that any determination is reviewed against the reported event. The device will be released for shipment based on the conclusion of this evaluation.